



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,802	06/26/2003	Mats Leijon	66291-351	2804
25269	7590	03/01/2004	EXAMINER	
DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005			MULLINS, BURTON S	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,802

Applicant(s)

LIEJON, MATS

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-38,40-53,55 and 57-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-38,40-53,55 and 57-70 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 32-38, 40-53, 55 and 57-70 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claims 32, 49 and 61, the prior art does not teach, alone or in combination, the claimed high-voltage rotating electric machine comprising a flexible high voltage stator winding including, inter alia, a current carrying conductor and inner and outer semi-conducting layers, wherein the current-carrying conductor comprises plural conductive elements, selected ones of said plural conductive elements insulated from each other, and at least one of said plural conductive elements uninsulated in order to electrically contact the inner layer.

In particular, the examiner notes that Takaoka is directed towards a transmission line cable (c.1, lines 18-29), not to a cable used as a winding in a stator of a rotating electric machine.

The Schuler reference teaches a bar-winding for electrical machines composed of twisted, insulated conductors 1 and uninsulated hollow conductors 2 (c.3, lines 55-56; Fig.1). However, Schuler's bar-winding is not flexible, since during manufacture a strip of mica-resin putty 4 is placed along the bar in a partially-hardened condition (B-condition) and then pressed for several minutes at 180 degrees C and then allowed to harden (c.4, lines 28-36).

Regarding claim 60, the prior art does not teach, alone or in combination, the claimed method of manufacturing a magnetic circuit for a rotating electrical machine including a high voltage cable and, inter alia, the steps of configuring the cable to be flexible, forming the conductor of a plurality of conductive elements, insulating selected ones of said plural conductive elements from each other, wherein at least one of said plural conductive elements is

uninsulated, and electrically contacting the at least one uninsulated conductive element with the inner layer.

Regarding claim 55, the prior art does not teach, alone or in combination, the claimed high-voltage rotating electric machine comprising a flexible high voltage stator winding wherein, inter alia, the winding is selectively connectable to a plurality of system voltage levels.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Specification

3. The substitute specification filed 13 November 2003 has been entered.

Drawings

4. Applicant's annotated drawing corrections filed 13 November 2003 are acknowledged. However, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: separate windings 14a, 15a and 16a and respective tappings 14b, 15, and 16b (paragraph 53) are not shown in Fig.2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Conclusion

5. This application is in condition for allowance except for the formal matters pertaining to the drawings, noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834